

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A video camera apparatus for capturing video and still images as frames, the apparatus comprising:

a solid image sensor having an electronic shutter[[,]] for outputting an image-sensing signal in a progressive scan mode, said solid image sensor including a plurality of pixel sensors configured to process charges accumulated on the pixel sensors as the image-sensing signal,

wherein the charges accumulated and stored for a first field of a particular frame are discharged before the charges accumulated for a second field of the particular frame are stored,
and

wherein the stored charges are read out in next two fields of a subsequent frame; and
drive control means for controlling the electronic shutter of the solid image sensor at a field cycle of a standard television system used as a basic cycle, thereby to output the image sensing signal from the solid image sensor in the progressive scan mode. [[;]]

~~whereby a state is provided for storing still pictures according to said progressive scan mode; and~~

~~whereby when said storing of a still picture according to said progressive scan mode is performed, the image information corresponding to said still picture is stored in a record medium such that upon playback of said still image information from said record medium said still picture will be displayed for a predetermined period of time.~~

2. (Currently amended) An image sensing method comprising steps of:

controlling an electronic shutter of a solid image sensor which outputs an image sensing signal in a progressive scan mode at a field cycle of a standard television system used as a basic cycle, said solid image sensor including a plurality of pixel sensors; and

processing charges accumulated on said plurality of pixel sensors as the image-sensing signal including: discharging the charges accumulated and stored for a first field of a particular frame before storing the charges accumulated for a second field of the particular frame; and reading out the stored charges in next two fields of a subsequent frame; and

outputting the image sensing signal from the solid image sensor in the progressive scan mode.[:,:]

~~whereby a state is provided for storing still pictures according to said progressive scan mode; and~~

~~whereby when said storing of a still picture according to said progressive scan mode is performed, the image information corresponding to said still picture is stored in a record medium such that upon playback of said still image information from said record medium said still picture will be displayed for a predetermined period of time.~~

3. (Currently amended) A video camera apparatus for capturing video and still images as frames, the apparatus comprising:

a solid image sensor having an electronic shutter[:,] for outputting an image sensing signal in an interlace scan mode or a progressive scan mode, said solid image sensor including a plurality of pixel sensors configured to process charges accumulated on the pixel sensors as the image-sensing signal,

wherein the charges accumulated and stored for a first field of a particular frame are

discharged before the charges accumulated for a second field of the particular frame are stored,
and

wherein the stored charges are read out in next two fields of a subsequent frame;

control means for controlling the electronic shutter such that a shutter speed in the
progressive scan mode is equal to a shutter speed in the interlace scan mode; and

output means for outputting the image sensing signal in the progressive scan mode, based
on the shutter speed[[:]].

~~whereby a state is provided for storing still pictures according to said progressive scan
mode; and~~

~~whereby when said storing of a still picture according to said progressive scan mode is
performed, the image information corresponding to said still picture is stored in a record medium
such that upon playback of said still image information from said record medium said still
picture will be displayed for a predetermined period of time.~~

4. (Currently amended) An image sensing method comprising steps of:

controlling an electronic shutter of a solid image sensor which outputs an image sensing
signal in an interlace scan mode or a progressive scan mode, such that a shutter speed in the
progressive scan mode is equal to a shutter speed in the interlace scan mode, said solid image
sensor including a plurality of pixel sensors; and

processing charges accumulated on said plurality of pixel sensors as the image-sensing
signal including: discharging the charges accumulated and stored for a first field of a particular
frame before storing the charges accumulated for a second field of the particular frame; and
reading out the stored charges in next two fields of a subsequent frame; and

outputting the image sensing signal from the solid image sensor in the progressive scan mode[[:]].

~~whereby a state is provided for storing still pictures according to said progressive scan mode; and~~

~~whereby when said storing of a still picture according to said progressive scan mode is performed, the image information corresponding to said still picture is stored in a record medium such that upon playback of said still image information from said record medium said still picture will be displayed for a predetermined period of time.~~

5. (Currently amended) An image sensing signal recording apparatus for recording video and still images as frames, the apparatus comprising:

a solid image sensor having an electronic shutter, for outputting an image-sensing signal in a progressive scan mode, said solid image sensor including a plurality of pixel sensors configured to process charges accumulated on the pixel sensors as the image-sensing signal,

wherein the charges accumulated and stored for a first field of a particular frame are discharged before the charges accumulated for a second field of the particular frame are stored,
and

wherein the stored charges are read out in next two fields of a subsequent frame;

drive control means for controlling the electronic shutter of the solid image sensor at a field cycle of a standard television system used as a basic cycle, ~~thereby to output the image sensing signal from the solid image sensor in the progressive scan mode;~~

scan converter means for converting the image sensing signal based on progressive scanning, into an interlace scan signal; and

recording means for recording the image sensing signal based on progressive scanning, or the image sensing signal converted into the interlace scan signal;

~~whereby a state is provided for storing still pictures according to said progressive scan mode; and~~

~~whereby when said storing of a still picture according to said progressive scan mode is performed, the image information corresponding to said still picture is stored in a record medium such that upon playback of said still image information from said record medium said still picture will be displayed for a predetermined period of time.~~

6. (Currently amended) An image sensing signal recording method comprising steps of:
controlling an electronic shutter of a solid image sensor which outputs an image sensing signal in a progressive scan mode at a field cycle of a standard television system used as a basic cycle, said solid image sensor including a plurality of pixel sensors;

processing charges accumulated on said plurality of pixel sensors as the image-sensing signal including: discharging the charges accumulated and stored for a first field of a particular frame before storing the charges accumulated for a second field of the particular frame; and reading out the stored charges in next two fields of a subsequent frame; and

outputting the image sensing signal from the solid image sensor in the progressive scan mode;

converting the image sensing signal into an interlace scan signal; and

recording the interlace scan signal or a progressive scan signal[[:]]

~~whereby a state is provided for storing still pictures according to said progressive scan mode; and~~

~~whereby when said storing of a still picture according to said progressive scan mode is performed, the image information corresponding to said still picture is stored in a record medium such that upon playback of said still image information from said record medium said still picture will be displayed for a predetermined period of time.~~

7. (Currently amended) A video camera apparatus for capturing video and still images as frames, the apparatus comprising:

a solid image sensor having an electronic shutter, for outputting an image sensing signal in an interlace scan mode or a progressive scan mode, said solid image sensor including a plurality of pixel sensors configured to process charges accumulated on the pixel sensors as the image-sensing signal,

wherein the charges accumulated and stored for a first field of a particular frame are discharged before the charges accumulated for a second field of the particular frame are stored,
and

wherein the stored charges are read out in next two fields of a subsequent frame;

control means for controlling the electronic shutter such that a shutter speed in the progressive scan mode is equal to a shutter speed in the interlace scan mode;

output means for outputting the image sensing signal in the progressive scan mode, based on the shutter speed;

scan converter means for converting the image sensing signal based on progressive scanning, into an interlace scan signal; and

recording means for recording the image sensing signal based on the progressive scanning, or the image sensing signal converted into the interlace scan signal;

whereby a state is provided for storing still pictures according to said progressive scan mode; and

whereby when said storing of a still picture according to said progressive scan mode is performed, the image information corresponding to said still picture is stored in a record medium such that upon playback of said still image information from said record medium said still picture will be displayed for a predetermined period of time.

8. (Currently amended) An image sensing signal recording method comprising steps of:
controlling an electronic shutter of a solid image sensor which outputs an image sensing signal in an interlace scan mode or a progressive scan mode, such that a shutter speed in the progressive scan mode is equal to a shutter speed in the interlace scan mode, said solid image sensor including a plurality of pixel sensors;

processing charges accumulated on said plurality of pixel sensors as the image-sensing signal including: discharging the charges accumulated and stored for a first field of a particular frame before storing the charges accumulated for a second field of the particular frame; and reading out the stored charges in next two fields of a subsequent frame; and

outputting the image sensing signal from the solid image sensor in the progressive scan mode;

converting the image sensing signal into an interlace scan signal; and

recording the interlace scan signal or a progressive scan signal;

whereby a state is provided for storing still pictures according to said progressive scan mode; and

whereby when said storing of a still picture according to said progressive scan mode is performed, the image information corresponding to said still picture is stored in a record medium such that upon playback of said still image information from said record medium said still picture will be displayed for a predetermined period of time.